INVASIVE SPECIES CONTROL PROJECTS (R1 SMALL GRANTS) CY 2014 FINAL REPORT

Project Title: Eradication of Yellow-flag Iris

Station: Mid-Columbia River NWR Complex

Contact Person: Kevin Goldie

<u>Project Description</u>: The project as described was to attempt to eradicate yellow-flag iris from Toppenish, McNary and Columbia National Wildlife Refuges using chemical and, where necessary, manual methods. Yellow-flag iris is an escaped ornamental rhizomatous perennial herb that can form dense mats in riparian and wetland areas, displacing native vegetation while providing little habitat or forage value for wildlife. Iris had relatively recently invaded these three refuges and was showing up in numerous distinct yet disparate areas, infesting what had been estimated as 12 acres within nearly 4,000 acres of moist soil units, wetlands and impoundments.

<u>Invasive Species Targeted</u>: Yellow-flag Iris (*Iris pseudacorus*)

Project Completion Date or Estimated Completion Date: 15-Sept-2014

Project Results: The Complex's Invasives Strike Team was tasked to locate and treat yellow-flag iris on all three refuges, using aquatic-use labeled glyphosate (e.g., Aqua Neat) @ 2-3% solution, plus the label rate of a non-ionic surfactant and acidifier (e.g., LI-700). They treated all known and encountered infestations on Toppenish Refuge in mid-May, with one member returning in mid-September to pick up a few patches skipped in the first round and to treat some additional patches discovered during other Refuge operations. The Strike Team treated all known patches in the Millet Pond area of the Wallula Unit of McNary Refuge in early May and on the Walla Walla River Delta area and the Peninsula Unit in late May. Two (small) untreated patches were discovered elsewhere in the Wallula Unit later in the year; unfortunately no one was available to follow up on these in 2014. Both have been added as high priority targets on the 2015 work list. The Strike Team surveyed the canyons and drainages on Columbia Refuge where yellow-flag iris had been reported in past years and did not find any extant plants. The biologist most familiar with the Columbia infestations was not available to assist in the field this year, so it is possible plants were present but were missed. Columbia Refuge has been moved up in the priority order for weed inventory and mapping efforts in 2015.

All treated iris turned brown and appeared to die but true efficacy will not be known until 2015. Efficacy of the 2014 treatments was found to be very high.

Number of Acres Treated: ~32.6 acres on two refuges (Toppenish and McNary NWR)

Number of Acres Inventoried and/or Mapped: ~ 4,000 acres on three refuges (Toppenish, McNary and Columbia NWR)

Number of Acres Restored: unk

Total Grant Amount: \$14,600

Breakdown of Expenditures*:

Category	Total \$ Spent	% of Total Grant
Equipment/Supplies	\$100	0.7%
Chemical	\$156	1.1%
Biocontrol Agents		
Travel (includes fuel costs)	\$1,600	10.9%
Biotech/Contractor Salary	\$12,744	87.3%
Restoration Materials		
Other (Describe)		
TOTAL	\$14,600	100%

 $^{*\} estimated$